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D. Allen,

Manchester College,  
Oxford.

# STOCK RAISING

AND

## SHEEP FARMING

D. Allen,

Manchester College,  
**North-Western Iowa,**

UNITED STATES OF AMERICA.

A PAMPHLET FOR EMIGRANTS AND A GUIDE  
TO NORTH-WESTERN IOWA.

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1879.

PRICE SIXPENCE.

# MAP OF THE 39 UNITED STATES,

SHOWING THE POSITION OF THE

## STATE OF IOWA.



### STATES

1. Maine
2. New Hampshire
3. Vermont
4. Massachusetts
5. Rhode Island
6. Connecticut
7. New York
8. New Jersey
9. Pennsylvania
10. Delaware
11. Maryland
12. East Virginia
13. North Carolina
14. South Carolina
15. Georgia
16. Florida
17. Alabama
18. Mississippi
19. Louisiana
20. Arkansas
21. Tennessee
22. Missouri
23. Kentucky
24. Illinois
25. Indiana
26. Ohio
27. Michigan
28. Wisconsin
29. IOWA
30. Minnesota
31. Texas
32. California
33. Oregon
34. Kansas
35. West Virginia
36. Nevada
37. Nebraska
38. New Mexico
39. Colorado

# STOCK RAISING & SHEEP FARMING IN NORTH-WESTERN IOWA.

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JAMES B. & WM. B. CLOSE.

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## *The object of this pamphlet*

Is to enable us to draw the attention of intending emigrants to the advantages of North-Western Iowa for all agricultural and stock-raising purposes, and to the facilities offered them by us for acquiring land and settling in that region.

## *To whom addressed.*

This pamphlet is only addressed to men with not less than a certain amount of capital. The more one brings, the better ; but an experienced and practical farmer, unincumbered with a large family, who could arrive in Iowa with a clear £350, ought to do well ; but we should not advise an inexperienced man to have less than £500. We do not recommend artisans or mechanics to go to North-Western Iowa, as it is a purely agricultural district. To labourers also we can hold out no great inducements—labour is cheap and no scarcity of men.

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## STATE OF IOWA.

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Some of the following paragraphs are taken from a pamphlet published by the Iowa Railroad Land Company, which extracts we have carefully read and can vouch for their accuracy.

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Iowa has neither Indians within its borders, nor alkali in its soil.

It is the first State of the Union in the number of hogs raised.

The second in the amount of corn produced.

The third in the production of barley.

The fifth in the number of milch cows, of which it has 665,300.

It yields about one-sixth of all the wheat grown in the United States.

For the dairy it has no equal. The first premium was awarded to it in 1876, at the Centennial on butter, and again in 1878, on cheese, at the great Fair and Exposition of the St. Louis Agricultural and Mechanical Association.

It has less of waste land in proportion to plough land than any other State.

It has a healthy climate, a fertile soil, and an abundance of pure springs and running brooks.

It has already a population of 1,500,000 intelligent, law-abiding people, whose character is expressed in the motto of the State : "Our liberties we prize ; our rights we will maintain !"



Such is Iowa now, with but a little over one-third of its area in cultivation.

When all its broad acres shall be under tillage, no one will dispute its position as being the first of all the States in agriculture.

### General Remarks.

The lands in the far-famed North-Western Region of Iowa are not situated upon the border of settlement and civilisation, nor where Indians, breaking out from the restraints of their reservations, can extend their incursions for murder, pillage, and outrage. Nor are the present inhabitants of the country in which the lands are located a class of people whose condition and ideas of life make them comparatively aliens to the habits and customs which prevail in the middle and north-western States of the Union and in England. The immigrants from those States and from England to the western region of Iowa will find themselves among a kindred people. They will not be called upon to abandon the comforts and conveniences, the social and educational advantages of homes in a well-settled community, to encounter the hardships and privations of frontier life. The pioneering period of development has already passed away in Iowa, and has been succeeded by a better and more advanced stage of civilisation. Pioneering, the forerunner of permanent improvements, has swept onward and beyond Iowa, and is now to be found only in western Kansas and Nebraska, Texas, New Mexico, Colorado, and other of the newer portions of the vast country. Here, in western Iowa, the farmers have already planted their orchards and their vineyards. They have constructed roads, and built bridges. They have, within easy reach, mills and shops, and stores to supply all their wants. They have established a common school system equal to that of any of the older States. Colleges, lecture halls, and churches invite them to paths of education and religion. Agricultural societies create at once fellowship and emulation among them, and diffuse knowledge of successful methods of farming, and of all new and useful implements. A peaceful and well-ordered civil government confers its blessings upon them. Railroads, never more than a few miles distant from their homes, traverse the country. A healthy climate invigorates and encourages them to labour, and a fruitful soil rewards their exertions an hundredfold. Ready markets are at their doors, at the railroad stations. They have the world at large for a customer, and the value of their products is not wasted away by long transportation. What more can sons of toil demand? What portion of the world offers more?

### Physical Geography.

Iowa contains about 55,045 square miles, or 35,228,800 acres. The surface of the State is remarkably uniform in its altitude. It nowhere rises to an elevation which can be called a mountain, nor are the watershed lines marked by distinct and easily defined ridges. Though everywhere undulating, it is in fact a vast plain lying slightly inclined toward the south and the east, the north-west corner of the State having about 800 feet greater altitude than the south-east corner, which, measuring from the surface of the Mississippi at low water, is but 444 feet above the sea-level. The great "divide" between the Mississippi and Missouri is much nearer the latter river, more than three-fourths of the State being drained by streams flowing to the south-east.

The most striking feature in the topography of the north-west is the predominance of *prairies*, a name first applied by the French settlers, and now universally adopted to designate natural grass land, in contradistinction to the wooded region, or, as it is generally called throughout the west, *timber land*, or simply *timber*. Probably nine-tenths of the eastern, and still a larger proportion of the western half of the State of Iowa is prairie. The timber is in general found skirting the streams, while the prairie occupies the whole of the higher portion of the country, with the exception of here and there an isolated group of trees standing like an island amid ocean.

In ascending from the level of a river to the high land in its vicinity we first cross the "bottom land" or "bottom," the portion of the valley which is level and

but little elevated above the surface of the stream. These bottom lands are frequently heavily timbered, and with a great variety of trees, among which the elm, linden, black walnut, white and burr oak, poplar, and ash are most common. The breadth of the "bottoms" is very variable. Generally the width of the valley is proportioned to the size of the stream; so that on small tributaries there is but a narrow belt of low land, within which the stream meanders with a very crooked course, crossing and re-crossing from one side of the valley to the other. Usually the rise from the bottoms to the general level of the surrounding country is by a gradual ascent, without steps, or terraces, or "bench land," the face of the country indicating an uninterrupted and gradual drainage rather than one characterised by epochs of repose.

### Climate.

In healthfulness the climate cannot be called in question. The census of 1870, taken by the United States, places Iowa, in this respect, in the front rank of States. The pure running water, with an absence of swamps and stagnant sloughs, renders the atmosphere salubrious at all seasons. In North-Western Iowa, malarious diseases and that scourge of some of the older settled States—the fever and ague—are never known. Pulmonary complaints only exist when brought here by the sufferers, and are greatly relieved by the dryness of the atmosphere.

Observations covering a series of years show that spring and summer are decidedly warmer in the Mississippi valley than in the same parallel in New York. A similar peculiarity is observed in regard to the distribution of rainfall. Statistics carefully compiled show that while the quantity falling during the year in the Mississippi valley, within the limits of Iowa, is large, being fully equal to that on the Atlantic coast in the same latitude, there is a relative increase in the quantity falling in spring and summer, and very considerable decrease in winter. It is to these peculiarities of the climate which insure heat and moisture during the growing season, no less than to the extreme richness of the soil, that the exuberant fertility of Iowa is to be attributed.

The early settlers on the Missouri slope insist that warm air currents give to that section of the State an earlier spring than is enjoyed by the eastern part. The country has not been long enough settled to test this claim by correct observations, but the universality of the belief among old settlers who have lived in both sections gives strong confidence in its being well founded.

Observations for a period of twenty years, made at Iowa City under the direction of the Smithsonian Institute, show the average rainfall in Iowa to have been 44.27 inches per year. The rain winds are from the south-west—the very opposite to those of the Atlantic States. The earliest snow within this period was October 17th, 1859, and the latest April 29th, 1851. Excepting in one or two seasons (the summer of 1863 being unusually cold), there had been no frosts seriously injuring the corn crop. The length of winter is indicated by the closing and opening of the Mississippi river (latitude 41° 30'), the average time of closing being December 23rd, and opening February 26th.

The mean time of the flowering of fruit trees during a period of thirty-two years was, the *Apple*, May 6th; *Plum* and *Cherry*, May 2nd; *Pear*, May 5th; and the *Quince*, May 10th.

### Soil and other Attractions.

The North-Western Region of Iowa presents attractions for the farmer which, taken as a whole, cannot be surpassed by any portion of the United States. Undulating prairies, interspersed with open groves of timber, and watered by streams pure and transparent, hills of moderate height and gentle slope—these are the ordinary features of the pastoral landscape. No country is more fertile, nor does any afford greater facilities for bringing wild lands under cultivation. Its native prairies are fields almost ready made to the hands of the tiller. Its rich

friable soil, scarcely less productive anywhere than that of its most famous valleys, returns him reward for his labour an hundredfold, while the succulent native grasses of its unshorn fields afford a provender for his stock equal in nutrition to the cultivated grasses of the East. Nor is its fertility easily exhausted. For centuries the successive natural crops of grass, untouched by scythe, and but very partially kept down by pasturage, have accumulated organic matter on the surface soil to such an extent that the most exhausting crops, in long succession, will not materially impoverish it. To this extreme richness, ease of cultivation must be added. Its broad fields, unbroken by stumps, rocks, stones, or other obstructions, afford the finest scope for the mower, the reaper, the planter, and other agricultural implements which have been invented to save the labour of the husbandman. Ninety-five per cent of the surface of Iowa is pronounced by the State Geological report to be tillable. With agricultural capabilities almost beyond computation, it is evident that farming must ever remain the principal element in the prosperity of the commonwealth.

But although marvellously fertile everywhere, there is a wide difference in nature and characteristics between the soil of Iowa lying east and that lying west of the watershed dividing the two great rivers of the States. East of the great divide the soil is the well known black loam of the "drift period," geologically. In the proportion of its component materials, it is generally uniform in nature and excellence, but is sometimes modified by local causes, possessing in some localities more sand, or gravel, or clay than in others. West of the divide the soil differs widely in character from any other in the State. It closely resembles the "loess" deposit in the valley of the Rhine, famous the world over for its richness. The celebrated geologist, Dr. Owen, calls it "silicious marl," and refers its origin to an accumulation of sediment in an ancient lake which was afterwards drained. The technical name given to the peculiar soil is "Bluff Deposit." As far as is now known, it covers an area more than two hundred miles in length, by over one hundred in width, drained nearly centrally by the Missouri; and it is to this region that we wish to draw the attention of settlers and emigrants.

Some of the physical properties of the Bluff Deposit merit especial mention. Except when darkened by decayed vegetation, it is of a slightly yellowish ash colour. It is perfectly homogeneous in composition and colour throughout, even where it is two hundred feet deep. Specimens taken from localities widely apart are not distinguishable from each other. So finely comminuted are its ingredients that to the touch it seems almost free from grit. Yet they are not very cohesive, and not at all plastic, and the soil does not "bake" or "crack" in drying nearly as much as that which contains an appreciable amount of clay in its composition. The peculiar property possessed by this soil, of standing unchanged in form when exposed to the weather, is quite remarkable. Wells dug in it require to be walled only to a point just above the water line, while the remainder stands so securely without support of any kind that spade marks remain visible for years. Embankments upon the sides of roads, or other excavations, although quite perpendicular, stand without change years after a bank of ordinary earth would have softened and fallen away to a gentle slope. This peculiarity is of great importance to the farmer, as it preserves the land from "wash," although it may have been only freshly planted. Another of its peculiarities, due to its silicious composition, is its freedom from stagnant pools and ponds, and the advantages it possesses of being constantly and completely under-drained. While it retains sufficient moisture at the surface, and crops growing upon it suffer less than in ordinary soils from drought, the distinct granular form of the silex, of which it is largely composed, enables water to pass through it as effectually, but not so quickly as through ordinary sand. As a result of this peculiarity the roads are uniformly good, and ploughing is not retarded by wet weather nearly so much as in less favoured soils.

#### **"Breaking."**

In a prairie state the word "clearing" is not understood, and a new comer has not to spend the best part of his life in cutting down trees, uprooting stumps, and

clearing away heavy logs from his farm as he would have to do in a "timber" country. On the contrary, his work is very simple, and all that is necessary is to plough up or "break," as it is technically called, the virgin sod to a depth not exceeding two and a half inches, which, with a good team of three horses or mules and a 16 or 18-inch plough, can be done at the rate of about two acres a day, he not having any rocks, stones, roots, or other impediments to contend with. There are several crops he can sow the same year, and thus get a return at once for his labour. Breaking season is from beginning of May to about 15th July. No other time will do.

### Fuel.

The Iowa Coal Fields contain at least seven thousand square miles, and the coal is practically inexhaustible. This field extends along nearly the whole length of the Des Moines river, as far north as Fort Dodge, and may perhaps be found north of that point. Its geographical distribution is such that no portion of North-Western Iowa is beyond the range of cheap and excellent fuel. Besides coal, there is in most portions of the North-Western Region of Iowa sufficient timber along the streams and in scattered groves to supply the fuel demands of the inhabitants. Artificial groves are among the first objects of the farmer's attention in a prairie country, and so rapidly is the growth of many varieties of our forest trees that a few years suffice to provide an ample supply for fuel, as well as shade and protection to flocks and herds. It is safe to say that there is to-day much more timber in Iowa than when first the plough of the white man turned its sod. Coal sells from 16s. to 18s. a ton at Le Mars.

### Agricultural Productions.

**INDIAN CORN.**—This is regarded as the great staple crop of the State, and is less liable to injury or failure than any other crop. No other grain can be compared with it in its varied uses and its intrinsic value and importance to all. In one season only during the past twenty-five years has the crop failed to mature fully before autumn frost. The yield is ordinarily from 50 to 70 bushels to the acre, but in some localities, with good culture, successive years have given from 100 to 125 bushels. The counties reporting to the State Agricultural Society in 1877 showed an average of thirty-nine bushels to the acre, although that season was an unfavourable one for this crop, in some of the largest corn-producing counties. The crop of 1878 would undoubtedly show a much larger average and a far greater yield, but the statistics of this crop have not been compiled at this time. From the various and rapidly-increasing uses to which this grain and its products are applied, the foreign demand may usually be relied on for a safe return, but a large profit can always be secured for its cultivation by home feeding. The crop of 1877, notwithstanding an unfavourable season, produced the magnificent yield, for the whole State, of 197,483,715 bushels—an increase in fourteen years of 133,599,804 bushels—and placed Iowa *second* on the list of corn-producing States. As the entire product of the United States is estimated at 1,280,000,000 bushels, it will be seen that our State produces about one-sixth of the entire crop of the country. When it is remembered that Iowa is yet in its infancy, even imagination staggers in attempting to realise what the yield of this great staple will be in the State when all its wild lands shall be under cultivation and more thorough processes of farming shall have doubled or even trebled the present average yield per acre.

**WHEAT.**—The well-drained silicious marl, as some geologists denominate the soil of the North-West of Western Iowa, furnishes, especially upon the uplands, a congenial growth to this grain, which yields here with more uniform certainty and excellence than in any other part of the State. The spring variety, of which there are several kinds, is that most cultivated, and yields, with ordinary cultivation and a fair season, from twenty to thirty bushels to the acre. "Iowa Spring" is frequently employed in the large grain markets to raise the grade of inferior qualities.

and generally commands the highest price. Winter wheat is raised to some extent, and it is believed will do well under a more careful system of planting and cultivating than is usually bestowed upon it. The crop of 1877, the last crop concerning which statistics have been made up, at the present writing, is estimated from an average of the counties reporting to the State Agricultural Society, to make a grand total of 54,440,000 bushels, which is about one-sixth of the estimated total yield of the United States.

**BARLEY AND OATS.**—These valuable grains are extensively cultivated, and with excellent success. Barley yields well; but owing to its extreme liability to injury from rain and storms after ripening, and while in the shock, it is planted in fields of smaller size, and more readily harvested. In the production of barley Iowa stands *third* in the list of barley-producing States. In recent years oatmeal has become largely used as an article of ordinary diet. It is cheap, highly nutritious, and palatable. A number of mills, some of very great capacity, have been erected in the State for its manufacture, and the demand thus created has given an increased value to the oat crop. The total product of 1877 was 46,750,000 bushels.

**FLAX.**—This is an invaluable crop to the settler, for it not only enables him to utilise his early breaking the first year, but leaves his land in cleaner condition for cropping the following season. It is also an exceedingly profitable crop, many new comers having been able the first year to sell sufficient flax seed to pay the expense of raising it, and the first cost of the land on which it was grown. The crop is increasing in value as manufacturers are using the fibre in various ways, thus making the straw worth more than the cost of saving and curing.

**POTATOES** and roots of all kinds yield enormously. Skilled agriculturists pronounce the peculiar soil of the Missouri slope as nearly identical in quality with the high priced lands of France and Belgium, so famous for their production of the sugar beet. Potatoes, however, seem to require care, owing to the Colorado beetle occasionally making inroads.

**SORGHUM SYRUP.**—This is a product of all parts of the State, and in quantity more than sufficient for all domestic uses. Recent experiments made in different States, by the direction of the Commissioner at Washington, have attracted increased attention to this crop. If the expectations of the Agricultural Department shall be realised by further experiment, the sorghum and corn fields of Iowa will be enabled to compete with the cane fields of Louisiana in the production of sugar.

**TAME GRASSES.**—The value of the grass crop can hardly be estimated in figures. It is the main food of the principal stock for several months of the year. Hay has a steady value everywhere and is no more subject to disaster by insects, storms, or accidents in harvesting than other standard crops. Blue grass, timothy, and clover succeed remarkably well, and would be far more extensively cultivated were it not for the excellence of the native grasses.

**WOOL GROWING.**—Sheep thrive well on the rolling prairies, and are there exempt from foot rot, scab, and other diseases common to a flat and muddy country. The pasture lands of some portions of the western slope are peculiarly adapted to wool growing. Sheep-walks are being established to a considerable extent already, and it only needs that the advantages of the locality should become known to add largely to them. The cheap bluff lands overlooking the Missouri, Big Sioux, and some other streams are the best for this purpose, and are generally within 10 miles of a railroad—either the Chicago and North-Western, the Sioux City and Pacific, the Maple River, or the Illinois Central, and the Chicago, Milwaukee, and St. Paul. They are well watered by living streams and numerous springs. Although too hilly for general agriculture, yet a part of almost every tract is susceptible of tillage; and scattered through the hills are found intervals of the finest character for cultivation and shelter.

The hillsides are clothed with the most excellent grasses, even to the summits. In all their general aspect, these lands closely resemble the celebrated "Downs" of England, so well known and appreciated by all who are skilled in sheep culture.

A great advantage possessed by these lands over any other sheep lands offered to the public consists in the nearness to market, which enables the sheep farmer to realise the highest market price for mutton, and also for the fleece.

**CATTLE RAISING.**—This branch of agricultural industry is becoming one of the most extensive and profitable in the State. The fertile prairies, covered with the most nutritious grasses and watered with clear and never-failing streams, afford a range of pasturage unsurpassed in excellence or extent. The grass known as the blue joint, said to be equally as good as the cultivated varieties, grows with great luxuriance in the valley bottoms, and can be had in an unlimited quantity for merely the expense of cutting and curing. Within the last few years, an earnestness amounting almost to a furor has existed among the farmers on the subject of improving the breeds. The best herds of Illinois, New York, and Kentucky have been largely put under contribution to advance this purpose. Wherever an important stock sale is being conducted in the United States or Canada, the Iowa stock breeder is sure to be present—an important personage. His "Herd Register" and "Herd Book" are better known and more often read than the Declaration of Independence. It may well be doubted whether any State in the Union can now show finer herds than those comprising the 9,690 thoroughbred shorthorns, owned in the State in January, 1875, and their descendants. The census of the State of that year (the last published) is silent in regard to the statistics of other breeds; but it is well known that the Jerseys, Ayrshires, Devons, Herefords, and Holsteins, have their advocates, and fine herds of each have been collected.

**HOGS.**—It is a source of pride and congratulation to the Iowa farmer that his State still maintains the lead over all the states of the Union in the production of hogs. The six largest hog-producing States are as follows:—Iowa, 3,263,200; Illinois, 2,750,000; Missouri, 2,560,000; Indiana, 2,375,000; Ohio, 1,755,700; Kentucky, 1,588,200. It will thus be seen that Iowa exceeds any other State in the Union by the large number of 513,200.

It is conceded that the best method of marketing the grain products of the State, increasing in area each year, is to condense the intrinsic value into the least possible bulk, attended with the least expense and labour, and yielding the most ample returns. For this purpose farmers are turning their attention to this branch of stock, as the most accessible and best means of disposing of their surplus produce. In no other branch of farming has there been so general and decided improvement; nor is there any in which the future outlook is more promising.

**BUTTER AND CHEESE.**—Fine pasturage, pure water, and good stock are required to give excellence to these products, and nowhere are these conditions to be found more readily and abundantly than in the North-Western Region of Iowa.

At the World's Exposition at Philadelphia, Iowa triumphed over all competitors and bore off the gold and silver medal awarded on butter. This deserved tribute is supported by the high character accorded to the product of many of the prominent creameries of our State in the most fastidious eastern markets, where it is considered "gilt edged," and brings the highest price. At the Fair and Exposition of the St. Louis Agricultural and Mechanical Association (1878), Iowa was again triumphant, bearing away the first premium from all competition, on cheese. The dairy, as a branch of farming, has greatly increased in the State in the last few years, and the day is near at hand when the surpassing excellence of Iowa will bring it to the first position among the dairy States. Even now, the State ranks as the fifth in the number of milch cows, of which it has 665,300, valued at \$15,674,468.\* The product of butter and milk, though difficult to estimate, is probably not less than \$30,000,000.

**FRUIT.**—Apples, plums, grapes, and the many varieties of berries, are all natives of the soil, and the cultivated varieties grow with great thrift. The pear and cherry are grown in great abundance. Of apples it need only be said that at the United States Pomological Exhibition in Richmond, Va., the first premium

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\* One dollar is equal to about 4s. 2d. One hundred cents equal one dollar (\$1).

for the best and largest varieties of this fruit was obtained for the products of Iowa. The crop of 1874 was 1,450,735 bushels, and the number of fruit-bearing trees, 2,342,027.

Many interesting statistics on the subject are afforded by the last State census, taken in 1875. In no way can the agricultural advantages of Iowa be better presented to the intelligent inquirer than by the following brief statement, compiled from official sources, of the actual farm products of the State for the year 1874, and their market value. The reader will of course make due allowance for the wonderful development of the State during the four years which have elapsed since 1874, the year for which the products are given.

	1874.	1877.
Number of bushels of Spring Wheat harvested ...	42,669,731	54,440,000
"    bushels of Winter Wheat harvested ...	759,277	—
"    bushels of Indian Corn harvested ...	136,284,542	197,483,715
"    bushels of Rye harvested ...	430,652	—
"    bushels of Oats harvested ...	29,144,352	46,750,000
"    bushels of Barley harvested ...	3,468,088	—
"    bushels of Buckwheat harvested ...	170,577	—
"    gallons of Sorghum Syrup made ...	1,489,421	—
"    gallons of Maple Syrup made ...	61,012	—
"    pounds of Maple Sugar made ...	97,159	—
"    acres of Blue Grass for pasture ...	4,716,302	—
"    acres of Tame Grass ...	986,419	—
"    tons of Hay from same ...	1,150,899	—
"    tons of Hay from wild grass ...	1,439,916	—
"    bushels of Potatoes ...	7,461,462	—
"    bushels of Sweet Potatoes ...	128,578	—
"    bushels of Onions ...	125,528	—
"    bushels of Turnips ...	484,310	—
"    bushels of Apples ...	1,450,735	—
"    bushels of Pears ...	10,039	—
"    bushels of Peaches... ..	50,747	—
"    bushels of Cherries ...	102,841	—
"    pounds of Grapes ...	9,707,705	—
"    gallons of Wine made ...	285,840	—
"    Horses of all ages ...	700,617	—
"    Mules and Asses ...	36,820	—
"    Milch Cows... ..	528,483	—
"    pounds of Butter (in 1873, 6,250,000) ...	35,174,531	—
"    pounds of Cheese made at factory ...	1,146,081	—
"    Cattle (except work oxen) ...	1,395,892	—
"    Thoroughbred Short Horns ...	9,690	—
Whole number of Hogs on hand, July 1st, 1874 ...	3,139,973	—
"    "    Hogs slaughtered and sold for slaughter in 1874 ...	2,514,421	—
Number of pounds of Wool .. ..	2,356,213	—
"    stands of Bees ...	59,437	—
Value of Farm Products ...	\$131,536,747	—
"    Market Garden Products ...	724,176	—
"    Products of the Orchard ...	1,179,962	—
"    Products of the Herd ...	43,051,594	—
"    Products of the Dairy ...	8,226,875	—

Thus the bright anticipations founded upon observation of the soil and climate will be found to be fully realised in the actual productions of the harvest.

### Educational Advantages.

The duty of the State to provide for the instruction of its youth of both sexes, at the public expense, has been recognised by Iowa, and ordained by its laws from its first organisation. In the execution of the duty, a general system of common schools has been established, and supplemented by county High schools, a State University, and a State Agricultural College. The common school system embraces a Superintendent of Public Instruction, a State officer elected by the people at large, having his office at the Capital and invested with general supervision over all the public schools of the State as well as the County Superintendents. Besides this

officer there is a County Superintendent, elected by the people of each county, to whom is given particular supervision of the schools in his county. Each civil township constitutes a school District, and can be divided into as many sub-districts as convenience may require. "Independent" districts are also provided for at the option of the electors. The districts, both township and independent, are governed by directors chosen by the voters of the district. There must be three directors, with one additional for each sub-district.

The funds required for the support of the common schools are derived from various sources, and are generally classified with regard to the object of expenditure into the "Teacher's," the "Contingent," and the "School House" funds. The last two are raised wholly by tax upon the property of the particular district to which they pertain, the amount being determined, within certain limits, by the Board of Directors of the District. But to the Teacher's fund there is applicable, not only taxes on the property of the district, but also the State school fund, derived from the school section in each township—the congressional grant of 500,000 acres—the donation of 5 per cent of the price of all public lands sold in the State, besides fines, forfeitures, escheats and sales of estrays. From a report on the condition of education in Iowa, for 1874, prepared by the Superintendent of Public Instruction for the Bureau of Education, it appears that the permanent school fund amounted to \$3,294,742.83, yielding an interest of \$304,836.64. There was received for School House Fund \$1,182,244.02; Contingent Fund, \$887,402.95; Teacher's Fund, \$2,757,641.04; making total receipts for school purposes of \$4,827,288.01.

All persons between the ages of 5 and 21 years are entitled to be admitted to the public schools. These must be kept in operation for six months each year, and may be as much longer as the electors may choose. In 1874 there were 9,253 schools taught for an average of 6.75 months, with an average attendance of 227,151 pupils.

Also, by the State law, a teacher is bound to be provided for every nine children, and a school-house for every 15—a building consisting usually of one large room, fitted up with every appliance for educational purposes.

The State University and the Agricultural College have large permanent endowments, derived from donations by the general government; in addition to which, liberal appropriations are made by the State to meet all needful expenditures.

From this brief sketch of the system of public instruction it will be seen that Iowa occupies a foremost place among the States in this important matter. Ample facilities for thorough education are provided for all, but yet the laws are only so far compulsory as to require the maintenance of schools in each district for a limited period each year. All beyond this is wisely left to the discretion of those most interested, the electors of each district, who can best adjust the intellectual pursuits to the needs and occupations of each community.

### Laws.

The early settlers of Iowa did not escape the hardships, deprivations, and discomforts incident to frontier life. Many are now living in affluence who were accustomed to "team" their wheat over the prairies to Chicago, and to labour temporarily in the lead mines at Dubuque, though scores of miles from their homes, in order to get "hard money" enough to pay their taxes. But as time rolled on, comforts and prosperity were attained. The rapidly increasing population necessarily converted the pioneers into lawmakers, and called upon them to shape the destinies of a commonwealth. Remembering the past, it was not strange that the first settlers should pass laws unusually favourable to men of small means, and especially designed to protect them against ill-luck, misfortune, or oppression. In no other State are the means essential to the support of a family so well secured to the citizen, free from all possibility of loss except through his own voluntary conveyance.

**THE HOMESTEAD.**—An examination of the more prominent features of the law in relation to the homestead will serve to show how thoroughly the prin-



ciple that the well-being of society requires that each family should be secured in the free and uninterrupted enjoyment of a home has been recognised and established in Iowa.

**EXECUTION EXEMPTIONS.**—The laws of Iowa on this subject are no less liberal than those relating to the homestead.

**RIGHTS OF ALIENS.**—By the laws of Iowa, aliens, whether they reside in the United States or any foreign country, may exercise all the rights of a citizen of the State in regard to the acquirement, holding, or transmission of property.

#### Titles.

As it is only ten or twelve years ago since the Government sold all its lands in North North-Western Iowa, the titles, being of such recent date, are short, and there is only a nominal charge of three shillings for recording them at the Court House of the county in which they lie.

**TREES.**—The culture of forest trees for fuel and timber has long occupied the attention of the people of the State, and has been amply stimulated and encouraged by the laws. It is safe to say that within a few years, the once treeless prairies of Iowa will be provided with forests amply sufficient for all the uses of the inhabitants. It is also a law of the State, that for taxation, every acre of trees planted takes off £20 from the ratable value of the farm for ten years from the time of planting, so that in many cases a farm pays no taxes for the land under cultivation.

**TAXES** are generally about one per cent per annum on the whole value of the estate real and personal.

#### No Fencing.

**HERD LAW.**—No expenditure incident to opening a new farm falls so heavily upon the settler, ordinarily, as the cost of fencing. Where stock are free commoners this expense is indispensable to the protection of the crops. But in Iowa the Legislature has wisely provided that the people of each county and civil township may adopt, by vote, a Herd Law, as it is commonly called, restraining stock from running at large. The people of North-Western Iowa have very generally availed themselves of the privileges of this law, to the great advantage of men of small means who can ill afford the cost of fencing in addition to other and necessary improvements. And as this section is eminently adapted to stock raising, to which it is largely devoted, the "Herd Law" is universally approved in its practical operation. During the day the stock is tended by a herder—who is most frequently one of the boys in the family—who directs them to their pasturage, and at night drives them to the corral or cattle yard. Where settlements are frequent and cattle numerous, herding becomes a business, and the herder oftentimes has several hundred in his herd, which he tends for an agreed sum per head. A boy can, however, always be hired for about £1 a month and his board, who, with a pony, can look after from three to five hundred head of cattle.

#### United States System of Land Surveys.

A glance at the map of Iowa will show that the counties have generally a rectangular outline, the boundaries having a north and south, and east and west direction. It will be seen also that the counties are divided into square and regular size, unless modified by the rivers. The large maps of this State show also that the whole land is divided into still smaller squares. This regularity in the division of the land is the result of an admirable system of surveys adopted by the United States government, which every person should understand, as deeds, leases of lands, tax receipts, and many of our laws are written with reference to it.

This system of public land surveys provides for the division of the whole country into small squares of uniform size, varying from that shape only when the large rivers, lakes, or seas makes it necessary. To begin such a division of the land, there must, of course, be fixed points and lines to measure from. The points may

be established anywhere, but usually some natural landmark is selected for them and a record made of its latitude and longitude. The primary line starting from such points are of two kinds; those running due north and south called "Principal Meridians," and those running due east and west are called "Base Lines." The Fifth Principal Meridian is the one from which all the north and south lines in Iowa are measured. Its point of starting is at the mouth of the Arkansas river, in the State of Arkansas, and it ends upon the banks of the Mississippi river at the boundary line between Clayton and Dubuque counties. The Base Lines from which all the east and west lines in Iowa are measured, starts from the mouth of the St. Francis river, in Arkansas, and runs due west. It crosses the Fifth Principal Meridian five miles west of the place of beginning, and forty-eight miles north of the beginning of the Meridian. The point of intersection of these two primary lines is really the point from which all the Iowa land surveys are measured.

**DIVISION INTO TOWNSHIPS.**—Commencing with the Fifth Principal Meridian and its base line, the whole country adjacent to them in a western and northern direction is divided into squares six miles across. The squares are called townships, and are designated by numbers, beginning with No. 1 on each side of the Base Line, and continuing from that line both north and south. Every township in the first tier north (or south) of the Base Line, however far east or west the tier may extend, is Township No. 1.

**RANGES.**—As the giving of the same number to many different townships might lead to confusion, "Ranges" of townships are adopted. This is accomplished

No. 1.

N

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

S

No. 2.

N

N. W. Quarter, 160 Acres.	N. W. of the N. E. Quarter, 40 Acres.
	S. Half of the N. E. Quarter, 80 Acres.
South Half, 320 Acres.	

S

by numbering the townships again, but this time eastward and westward. This second series of numbering relates properly to the ranges of townships. So if we give the township number north or south of the Base Line, and the Range number east and west of the Principal Meridian, it is not possible to mistake the township for any other.

**SECTION LINE.**—Each township is divided by both east and west, north and south lines in thirty-six equal parts, called sections, and the lines are called section lines. Each section is, of course, one mile square, and contains 640 acres. Sections are divided into "quarters" by "half section lines." And quarter sections may be, and often are, divided in a similar manner into four equal parts, called "quarters of quarter sections."

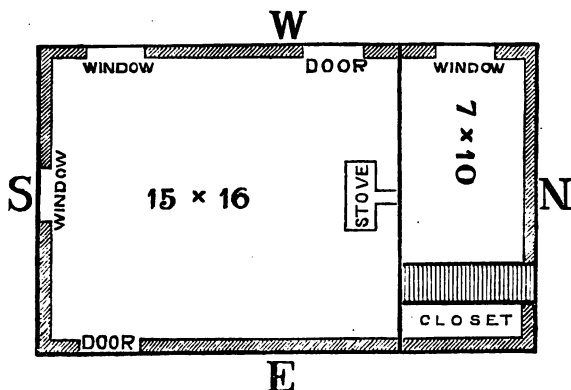
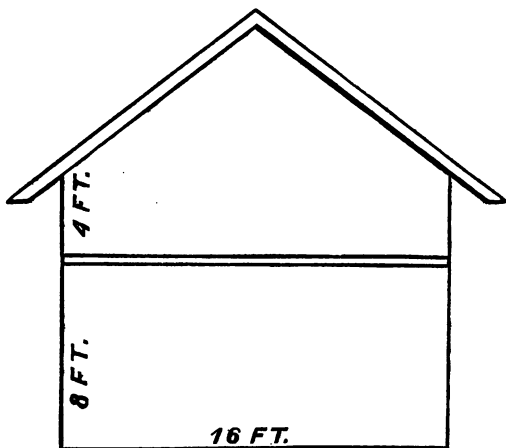
The sections of townships are numbered from one to thirty-six, beginning in the north-east corner of the township and continuing as in the diagram shown on this page.

This order of placing the numbers is never departed from, and one soon knows his position in a township by learning the number of the section he is upon. Sections are divided and designated as shown in diagram 2.

By means of this excellent system of land surveying, a clear and accurate description may be given of any piece of land in a few words.

### Houses.

The houses are built of wood—two thicknesses of planks fastened to uprights and boarded inside, with air spaces between—perfectly wind and water tight and warm. There are plenty of good carpenters in the country to build the houses, and a house 16 × 22 feet, with lower rooms 8 feet high and upper 4½ feet at the sides, costs, when finished, about £45 to £50.



### Market and Railroads.

Chicago, the greatest live-stock and produce market in the world, is the great market of the West, and all other markets are regulated by its prices. No one need have the fear of not finding a market there, and of not being able to dispose of their stock. There are also agents all throughout the West, and the farmer can sell his produce at his own door if he wishes; but it is usual for the larger farmers themselves to ship their grain, &c., and to take their stock into Chicago.

There are three main lines of railroads from the north-west of Iowa leading directly to Chicago, viz., the Chicago and North-Western, the Iowa Division of the Illinois Central, and the Iowa Division of the Chicago, Milwaukee, and St. Paul.

Each of these lines have many branch lines, and it is difficult in North-Western Iowa to get more than twenty miles away from a railroad. A car carrying seventeen head of cattle, weighing on an average 1,250lbs. apiece, costs £12 from Le Mars to Chicago, a distance of 490 miles; and for every two cars a free pass there and back is provided for the man in charge.

### Domestic Servants

are scarce, and there is always a demand for good, industrious, and intelligent girls. They are treated better than in England, and are looked upon more in the light of helps than servants. A good girl who knows her work can earn as much as £1. 15s. a month and her board.

### Sport.

There is capital small-game shooting—any quantity of prairie hens, American quail, and splendid wild duck and geese shooting in the autumn and spring. There are a few deer, but no other large game.

The lakes about Dickinson County and towards the Minnesota border are full of a great variety of fish, wall-eyed pike being especially abundant.

### Population.

The population in North-Western Iowa is thrifty, law-abiding, and industrious. It consists of many settlers from the New England States, and many Germans, Scandinavians, English, and Scotch. The poor Irishman and the negro are conspicuous only by their absence. Fire-arms, revolvers, bowie-knives, and such play-things are never carried about and are never wanted.

Iowa was organised as a territory in 1838; population, 22,859. Admitted as a State in 1846; population, 95,588.

Population, 1856	...	...	...	...	519,055
" 1867	...	...	...	...	902,040
" 1875	...	...	...	...	1,350,544
" 1879	...	...	over	1,500,000	

### Why North-Western Iowa is not yet fully settled.

The question has been asked, If North-Western Iowa has all the advantages above enumerated, why is it not more settled, and why can lands yet be bought at such cheap rates?

If one considers that it is only a little more than ten years ago since the country was cleared from Indians, and that now it is covered with railroads, villages, towns, and settlements, the advance it has made within that time appears almost magical. In the few years we have known the country the advance has been and is most marked; railroads are now made and extending in all directions, and counties have doubled, and more than doubled, in population: for instance, Crawford County, which at that time had 3,777, has now just over 10,000; Ida County has increased from 449 to 3,800; Woodbury County from 6,988 to just under 12,000; Plymouth County from 3,884 to about 9,500; and other counties in the same proportion.

Where it not, however, that in the year 1867, when the lands in North-Western Iowa were thrown open by the government for sale and pre-emption, they were eagerly bought up by speculators, who had heard of the fame of this region, the country would have been even more settled than it now is. These speculators at once put such a price on their lands that many intending settlers passed on to the cheaper regions further West; and it is when some of these speculators, who usually reside in the large Eastern cities, are pressed for ready cash that the best bargains are made.

Also, the country acquired a bad name from occasional visitations of grass-hoppers; but of late years they have been considerably less, owing to the increasing

numbers of settlements, and although they have only done damage in patches, and then only to small grain, we hope, on account of the rush of settlers there has been into Nebraska and Dakota, that we have seen the last of them, and as they do not touch either maize or grass, to any appreciable extent, stock raising is not interfered with by their inroads. North-Western Iowa for several years has been the frontier of the settled countries—it is now no longer so, Nebraska and Dakota taking that position—and, as the grasshoppers in their incursions come from the West, it will now be the turn of those newer countries further West to be occasionally visited by them. If we follow the history of the grasshoppers, we find them even as far back as Illinois, when that State was settling up twenty-five years ago; and, as civilisation advanced, the grasshopper receded.

## DESCRIPTION OF SOME OF THE COUNTIES IN NORTH-WESTERN IOWA.

CRAWFORD COUNTY is next west from Carroll, and fairly represents the beautiful middle region of Western Iowa. The Chicago and North-Western Railroad enters the county a little north of the centre of the eastern boundary line, and running south-west down the valley of the Boyer river, a distance of over 31 miles, makes its exit near the south-west corner, affording excellent communication with the eastern or western markets. A more pleasing rural landscape than is afforded to the traveller down this valley is rarely seen. Compared with the size of the stream, the valley is wide and has a deep rich soil, well adapted to the production of the finest crops of corn, wheat, oats, and other grain; and the uplands, beautifully diversified into hill and dale, are but little inferior to the bottoms in fertility. The East Boyer enters Crawford from Carroll County and forms a junction at Denison, the county seat, with the main river. The main river, or West Boyer, has its source in the northern portion of Sac County, and flows southerly across that county, entering Crawford near the north-east corner, and thence flows south-westerly across the county. The East, West, and Middle Soldier cross the north-western, and the Nishnabotany the south-eastern portion of the county. All these streams have numerous branches, and in fact no county in the State possesses a more complete system of natural drainage. The small streams are very numerous, and reach, with their rivulets, almost every quarter section. The surface is rolling, but the slopes are long and easy. The land cannot well be called broken, very little of it being too rough or abrupt for successful cultivation. Uniformly, the soil is the light-coloured, fine silicious material, called the Bluff Deposit by the later geologists, covered by the usual vegetable mould, with deep accumulations of black loam in the larger valleys. Groves are found on the Boyer and East Boyer and some of the smaller streams. The proportion of natural wood to prairie is estimated at  $2\frac{1}{2}$  per cent. Artificial groves of cotton wood, soft maple, walnut, and box elder have been largely planted, and are now dotting the landscape with beauty and adding largely to the wealth and resources of the county. Wild fruits are very abundant. Among these are plums, grapes, strawberries, raspberries, crab-apples, and cherries. There are two steam and four water mills in the county for flouring, besides one wind grist mill. The Maple River Railroad crosses near the north-western corner of the county, and adds materially to the facilities afforded by the main line of the Chicago and North-Western Railroad. The county contains 20 townships, or 720 square miles. The principal places in Crawford are West Side, Vail, Denison, and Dowville.

WEST SIDE is located on the Chicago and North-Western Railroad, near the east border of the county. Population 400; Stores, 7—four general assortment of merchandise, one drug, one hardware, one furniture; Church—Methodist; one school-house, one hotel, one printing office, one elevator, one steam mill; lawyers, two; doctors, three; bank, one.

**VAIL**, a very thriving town, next east of Denison, and rapidly improving. Population, 450. Churches—Presbyterian, Methodist, Catholic, Episcopal. The first-named denomination have a church already erected at a cost of £500. The other societies are organised and are expecting to build. Stores—four general assortment, two hardware, two furniture, two drug, two millinery; School-house—one, graded, cost of building, £700. Miscellaneous—one steam flouring mill (three run of burrs) with corn-sheller attached, one brewery, one brick yard, one newspaper, two elevators and one grain warehouse, two hotels, two lumber yards. Shops—one wagon, three blacksmith, two shoe, one harness, and three carpenter. Shipments from Vail have more than doubled the past year.

**DENISON**, the county seat, on the railroad, and at the junction of the Boyer and East Boyer rivers, is already a place of great importance. It is located upon a succession of elevations from which the most charming landscapes of the Boyer Valley are presented. The population is about 1,500. It has twenty-four stores of the usual general variety, and shops of all kinds in great numbers. Its religious wants are supplied by six churches—Baptist, Methodist, Presbyterian, Lutheran, Catholic, and Episcopal. There are two school-houses, costing £3,500. It has two newspapers, three elevators, one mill, three hotels, three lumber yards, four coal yards, one churn factory, two soap factories, one machine shop and foundry, two banking houses.

**DOWNVILLE**. Population 260; Stores—two general stock, two grocery, one drug, one hardware and saddlery. Churches—Latter Day Saints and Methodist. Graded school just completed at a cost of £760. Miscellaneous—one hotel, one steam elevator and grain warehouse, one water mill, one bank and real estate office, a number of shops. Timber is abundant in the neighbourhood. Hard wood sells at 14s., and soft wood at 10s. per cord.

**WOODBURY COUNTY** is situated on the western border of the State, and embraces a superficial area of about 832 square miles, or 432,480 acres. About 146,000 acres of this land is Missouri river bottom, of great fertility and unsurpassed for agricultural and grazing purposes. It averages a width of from ten to fifteen miles. But a small portion of it is subject to overflow. The Missouri and the Big Sioux rivers form the western border of the county. The eastern and middle portion is watered by the Little Sioux and the West Fork. Maple river crosses its south-eastern, and the Floyd its north-western, townships. The latter stream is named to perpetuate the name of Charles Floyd, who died about two miles south of its mouth, in August, 1804, a sergeant in the celebrated exploring expedition of Captains Lewis and Clark. Forty-four years afterward the first permanent settler of the county located at Floyd's Bluffs, very near the spot where Sergeant Floyd was buried by his comrades. The uplands in this county rise less abrupt from the bottom than in Monona County. In the interior they are rolling, and descend into the valleys by graceful declivities. The watercourses are confined within steep, grassy banks, margined by sloping bottom lands a mile or two in width. The subsoil of the uplands consists of an admixture of vegetable matter with fine silicious marl, possessing great fertility. In the valleys a black loam several feet in thickness occurs. The uplands are well adapted to the growth of grain, and the valleys afford the best of corn and finest of meadows. Considerable tracts of wood border the Missouri, the cottonwood, elm, hickory, and black walnut predominating; and in some places native forests overspread the uplands from the banks of the larger streams and intersecting ravines; but the inland region is a vast rolling prairie, with a luxuriant growth of herbage, possessing scarcely a tree.

The Maple River Railroad runs through the south-eastern township of the county, following the course of the Maple river, and opens to settlement a large body of very desirable farming lands, the distance of which from railroads, until the opening of this line in November, 1877, preserved them from being culled. In the county are now four grist mills.

The principal towns are Sioux City, Sergeants Bluff, Sloan, and Danbury—the three first being upon the S. C. and P. R., and the latter on the Maple River Railroad.

**SIoux CITY**, [the county seat, is beautifully situated on the Missouri, immediately above the Floyd, and about two miles south of the Big Sioux. It is favourably located for commanding the trade of a large district of country. The business portion is built upon a "bench" bordering the river, while round it rise the bluffs, affording fine locations for residences. In the Spring of 1835, there were two log cabins on the present site of Sioux City. About the 20th of July of the same year the first stage and mail arrived. The present

population is about 6,700. There are nine organised church societies, each having a suitable place of worship—Episcopal, Catholic, Methodist, Presbyterian, Baptist, German Reformed, Norwegian Lutheran, Swedish Augustana, Brotherhood of St. John. There are three school-houses, three primary, one graded, and one high school; three newspapers, three elevators, two grist mills, eleven hotels, an academy of music, manufactories of vinegar, crackers, soap, agricultural implements, carriages and wagons, confectionery, steam engines and boilers; stores, fifteen grocery, three dry goods, four clothing, boots and shoes three, book two, music two, drug four, hardware four, liquor two, auction two, chinaware two, confectionery five, jewellery three, furniture two. A magnificent court house has been built at this place, costing £18,000. It is the junction of five railroads.

**SERGEANTS BLUFF.**—Population 400. Three general stores, one church—Methodist; Congregational Society organised but without building, one sawmill, one elevator, and a school-house. The principal business of Sergeants Bluff is the extensive manufacture of pottery, of superior quality, and bricks of excellent quality, which are shipped to points over a hundred miles distant.

**SLOAN** is 21 miles from Sioux City, and a promising town, doing a good business with the surrounding country, which is well improved.

**DANBURY**, named after one of the oldest settlers of the county, Dan Thomas, whose "store" stood upon the present town site, and was the general rendezvous for all benighted travellers in the early days, bids fair to be an excellent business town. A first-rate water power on the Maple river, near this place, deserves the attention of some enterprising miller, who could utilise it greatly to his own profit and to the convenience of the surrounding country.

**PLYMOUTH COUNTY** is on the western boundary of the State, in the third tier from the north end, and contains 840 square miles, or 537,000 acres. The principal streams in the county are the Floyd, the west fork of the Little Sioux, Broken Kettle, west branch of the Floyd, and Perry and Willow creeks. All these streams run very uniformly from the north-east to the south-west, affording good stock water and drainage to almost every half section in the county. There are no marshes or swamps in the county worthy of mention. The general character of the county is gently undulating prairie, with some broken land in the western part of the county, especially on the Big Sioux and Broken Kettle. The soil is the productive bluff deposit peculiar to the western slope, and cannot be excelled in fertility. The Iowa Falls and Sioux City Railroad (operated by the Illinois Central Railroad), traverses the county, extending from the north-easterly to the south-westerly portion, following the course of the Floyd. At Le Mars the Sioux City and St. Paul Railroad, coming down Willow creek, makes a junction with the Iowa Falls Road, and uses its track at present to Sioux City, a distance of 25 miles. These roads afford ample market facilities to every portion of the county. The county has made very rapid advances in both population and improvement and now contains about 9,000 inhabitants; and is one of the most attractive portions of the State, for general agriculture as well as stock raising. It has now three fine grist mills and over 100 school-houses. The railroad stations are James, Merrill, Le Mars, and Remsen.

**LE MARS**, the county seat, is located at the intersection of the Iowa Falls and Sioux City Railroad with the Sioux City and St. Paul Railroad, 25 miles from Sioux City, and is a very flourishing and promising town, possessing a population of about 2,000. There are sixty-five stores, of which six deal exclusively in dry goods, nine in groceries, four in hardware, three in drugs, two in boots and shoes, two in books and stationery, three in furniture, three in tinware, and the remainder in general stocks. The churches are—Methodist, costing £600; Congregational, £800; German Methodist, £400; and Roman Catholic, £1,000. An Episcopalian Church is in course of erection. The public school building cost £3,000, and the school requires the services of six capable teachers. A normal department is a prominent feature of this excellent school. Court house and jail cost £2,000. Among the miscellaneous establishments are two newspapers, both weekly; five elevators, two steam flouring mills, one planing mill, four wagon factories, one barrel factory, one cigar factory, three banks, seven hotels. The shipment of wheat from this station in 1877 was 750,000 bushels.

**MERRILL, JAMES, AND REMSEN**, are small stations at present, but being surrounded with extremely rich farming lands must grow with the development of the country, and soon become attractive villages.

**CHEROKEE COUNTY**, lying between Plymouth and Buena Vista, is twenty-four miles square, and contains 368,640 acres. It is well watered and drained by

numerous streams flowing in a southerly and south-easterly direction. The largest of these is the Little Sioux, which enters near the north-east corner of the county, and flows diagonally across its entire extent. The Maple, with its headwaters in the north-eastern border, runs in a more southerly direction. Fish of various kinds abound in the Little Sioux. The general surface of the county is rolling, and very little of the land is too broken to be cultivated with ease. Composed of the bluff deposit, or silicious marl, which characterises the Missouri slope, the soil is of excellent quality, and well adapted to the production of corn and other grains in great perfection and abundance. The valleys, as usual in this portion of the State, present unusual attractions to the farmer. Water is everywhere readily found by digging but a few feet below the surface. Along the Little Sioux there is found considerable timber. Several good mill sites are afforded by the same stream, which meanders through one of the most beautiful valleys of the State.

Few, if any, counties in the State offer more attractions and advantages to the settler than Cherokee. There are four flouring mills in the county and one saw mill.

The principal towns of the county are Aurelia, Cherokee, Hazard, and Marcus, all situated upon the line of the Iowa Division of the Illinois Central Railroad. Besides these stations, post-offices are established at Pilot Rock and Washta.

AURELIA, 68 miles from Sioux City, is located on one of the principal branches of the Maple river, and the surrounding country partakes of the characteristics of the beautiful and luxuriant valley of the main stream. The population is 250. The business wants of the community are supplied by six stores, four elevators, two good hotels, and a number of mechanic shops. The Methodist, Baptist, and Scandinavian, have each an organised church society. Aurelia would be an excellent location for a steam flour mill.

CHEROKEE is the county seat, and was laid out in 1870, on an elevated plain at the right of the Little Sioux. It has had a rapid and healthy growth, and now contains a population of over 1,300. There are of stores, seven dry goods, three drug, three clothing, five grocery, three boot and shoe, one jewellery, three hardware, four millinery, and one furniture. Churches:—One Methodist, cost £360; one Baptist, cost £500; one Presbyterian, cost £700; one Congregational, cost £600; one Catholic, £450; one Advent, £380; besides three other church societies organised, but without buildings—Freewill Baptist, United Brethren, and Christian. School-houses: one, cost £1,200. There are also one grist and saw mill, value £3,000; four elevators, three banking houses, four hotels, four lumber yards, four coal yards, four dealers in agricultural implements, three weekly papers, eleven lawyers, four physicians, ten insurance agents, besides representatives of all the useful occupations required in a prosperous and rapidly growing community.

HAZARD is a shipping station, with two stores, a lumber yard, and elevator. Population 100. A Congregational Church Society is organised.

MARCUS is a thriving business and market town, with a population of 350. It has 13 stores of various kinds, three agricultural implement warehouses, two elevators, two hotels, two lumber yards, one broom factory, and Catholic, Congregational, Lutheran, and Methodist Church Societies, and one good school.

SIOUX COUNTY lies directly north from Plymouth, and is watered by the same streams that flow through the latter county, which, with Rock river and Indian creek, furnish water and drainage in great perfection. The county has also the same characteristics of soil and surface as before mentioned of Plymouth. Population, 3,120. Not a single rock is to be found in the county. The St. Paul and Sioux City Railroad affords the means for marketing produce, besides furnishing ready supplies of lumber from the Upper Mississippi. Orange City is the county seat.



THE  
FIRM OF J. B. & WM. B. CLOSE & CO.

Consists of Messrs. James B. and Wm. B. Close, who were educated at Trinity College, Cambridge, and took a prominent part in the affairs of the Cambridge University Boat Club. After leaving Cambridge they settled several years ago in North-Western Iowa, and have now acquired a thorough knowledge of the country, of the people, and of farming matters, as they own large stock, sheep, and grain farms.

*Object of the Firm.*

During the last summer (1879), and before the firm was constituted as a help to emigrants, we received numerous letters from friends and others inquiring into the merits of North-Western Iowa; and seeing in the English papers the large amount of correspondence respecting emigration, we thought the interests of all would be best secured by personal interviews with one of the firm, and for this purpose Mr. Wm. B. Close has come over to England.

*Advantages offered by the Firm.*

Intending emigrants are offered the following advantages by the firm:

Mr. Wm. B. Close, being now in England, can be seen by those interested in emigration, by addressing him to Estate Office, 90, King Street, Manchester, when he will arrange an interview, and will gladly give any further information he can as to the best steamship and railroad lines, with whom he has made special and cheaper rates, and how to make the entire journey as easy and inexpensive as possible; also advises them concerning outfits, &c., whereby much useless expense and trouble is saved; and gives them the benefit of his experience in any other matter. When the intending settler reaches Le Mars he is at once taken in hand by Mr. James B. Close, who, without loss of time, shows him the best and cheapest lands from which to select a desirable farm, thus avoiding the useless expense of hotels, and the waste of time and money occasioned by travelling about

the country. Or, should the new comer prefer it, he will find him a farm, where, by paying for board and lodging to the amount of twelve to fourteen shillings a week, he could stay until he had made up his mind and judged whether the country and mode of life would suit him or not. Or, if he should be totally inexperienced, would help him to find a good stock farm, where, for a small premium besides his board, he could, before laying out his money, get a practical insight into farming. Then, should the settler (in any of the above cases) decide on buying any of the lands shown him, Mr. James B. Close will act for him as if for himself, and buy them at the lowest price, look to the title—a most important item, and one that requires considerable experience (it being a frequent practice throughout the United States and Canada to sell lands to settlers with bad titles)—and see that the deed is made out correctly, and properly recorded. Then, after the land is bought, he sees to the building of the frame-house and the sheds, and also that the work is well done, and that the material employed is good; also superintends “the breaking” or first ploughing of the land, which requires considerable care; careless “breaking” showing its effects for several years afterwards; and generally looks after the new comer’s interests until he is fully settled on his farm.

The firm, having dealt far more extensively in lands than anyone else in the country, are always fully advised when a cheap piece is for sale, and feel confident we get lands three to four shillings an acre less than the local agents, and by buying lands for several purchasers at the same time, we still further reduce the price of purchase. In the building of houses also we effect a great saving; having built over forty this year, we have wholesale rates from large firms of timber merchants, who ship direct to us, and are able to build fully one-third cheaper than the local agents and carpenters.

We aim also at a system of co-operation, by which, by bringing the intending settlers together, they buy their lands at one purchase, have their houses, etc., built by the same contract, and their machinery, implements, stoves, furniture, etc., etc., forwarded them from the manufacturers at wholesale prices.

We can thus save a settler a large sum in actual expenses, besides preventing him from falling into the hands of unscrupulous agents. For the whole of the above services the firm make a charge of £25, which includes the commission on purchase of lands up to 160 acres, and other items of expense enumerated above. Should more than 160 acres be wanted the firm charge for the excess the usual commission of five per cent.

If, however, as is generally the case, the firm receive the commission from the other side, no further charge is made, and the five per cent on the price paid for the purchase of the lands is deducted from the original charge of £25. Should anyone be dissatisfied with the country and leave before a month is out without purchasing, the whole sum of £25 will be returned.

## PRICE OF LANDS.

The price of lands varies according to its quality and contiguity to railroads. We have a list of first class lands, within eight or ten miles of a railway station, that can yet be bought, cash down, for 15s. to £1 per statute acre in tracts of 80 to 160 acres, and suitable in all respects for stock or grain farms. We generally buy lands from non-residents, and have travelled even as far as New York, 1,500 miles, to settle a bargain when we thought it was a good one. In this way we have always lands on hand for sale 25 per cent and more cheaper than the lands offered by the railroad companies, and, as we stated above, by buying a number of farms together we can get them at a still further reduction.

Lands are very frequently bought on the "time" system—*i.e.*, the purchase money is paid in instalments covering a certain number of years, generally three to five. We recommend, however, if possible, to buy for cash, as there is a marked difference in the price, and no yearly interest to meet. We append an example of the "time" system as followed by the Iowa Railway Land Co. The interest charged by the above company in all cases is 6 per cent per annum, but on *Short Time* there is an advance of 5 per cent on the *Cash* price, and on *Long Time* an advance of 15 per cent.

A purchaser's account would stand as follows, supposing he contracted for 40 acres on either of the above terms:—

### SHORT TIME EXAMPLE.

(At £1. 5s. per Acre.)

	INTEREST.	PRINCIPAL.
Cash Payment .....	£2 5 ...	£12 10
In one year .....	1 10 ...	12 10
In two years .....	0 15 ...	12 10
In three years .....	— ...	12 10
	£4 10	£50 0
Total .....	£54. 10s.	

### LONG TIME EXAMPLE.

(Price of same, £1. 7s. 6d. per Acre.)

	INTEREST.	PRINCIPAL.
Cash Payment ...	NONE.	... £11
In one year .....	£2 12 9½ ...	NONE.
In two years .....	2 12 9½ ...	11
In three years ...	1 19 6 ...	11
In four years .....	1 6 6 ...	11
In five years .....	0 13 3 ...	11
	£9 4 9½	£55
Total .....	£64. 4s. 9½d.	

For all cash, the same land may be purchased for £47. 10s. down at date of purchase, or £1. 8s. 9d. per acre.

We may as well state that we have no lands of our own for sale at prices that would tempt a purchaser at present. We have succeeded in getting them near to each other, and do not wish to part with any yet. We can purchase, as agents, adjoining lands cheaper than we would be disposed to sell our own.

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## MORE PARTICULARS ABOUT STOCK RAISING.

We wish more particularly to draw the attention of settlers to the advantages of stock and sheep raising. The following letter, addressed to the editors of the leading Manchester and Liverpool papers, and published by them, covers most of the principal points :—

### STOCK RAISING IN NORTH-WESTERN IOWA.

Sir,—I have lately returned from the United States for a few months, and I am struck with the great amount of correspondence in the newspapers on the relative merits of the different places where an intending emigrant might settle. Those of your readers who are thinking of emigrating, and are hesitating where to go to, would, perhaps, be interested in hearing of my experience in North-Western Iowa.

After I left Cambridge, having a taste for open-air life, but with a very slight knowledge of farming, I travelled over most of the American Continent in search of a good place to settle in for the purpose of stock raising, and I finally decided that no other place I had seen offered so many advantages for all agricultural purposes as the Missouri slope in North-Western Iowa. It is now three years since I, with two brothers, settled in that State, and we have, none of us, any reason to regret our choice.

The country is undulating open prairie, free from timber except along the river banks, and covered with splendid grass—good alike for grazing and making hay. The soil is the famous “Bluff deposit” of the Missouri, an alluvial deposit, and its richness, fertility, and depth, have to be seen to be believed; it is practically inexhaustible, being largely impregnated with phosphates of lime, and having a porous sub-soil varying from 30 to 50 feet in depth, enabling the crops to thrive both in wet and dry seasons. The new comer has no clearing at all to do. He has simply to plough up the virgin sod to a depth not exceeding 2½ inches, and has no stones, roots, etc., to contend with in his ploughing.

Manuring, except among the very best class of farmers, is almost unknown, and when the manure heap gets so large as to be in the way, the stables or sheds are torn down and put up in a fresh place.

Maize is the staple crop of the country, and Iowa rivals Illinois in the amount produced. It is a certain crop, no one, since the country has been settled, knowing of a failure in that crop. Wheat, oats, barley, etc., are also good crops. I have reports from several of my farms stating the yield of wheat this year has fallen very

little short of 30 bushels to the acre. Still, owing to its occasionally suffering from blight, it is not as certain a crop as in Manitoba, where, however, cattle cannot be fattened so cheaply, the winters being longer, and its latitude being too far north to grow maize.

Admirably adapted as the country is for grain raising, it is peculiarly so for stock raising; and although in grain raising a farmer can make his living, yet, on account of the low price of cereals, he will find it difficult to lay by much for a rainy day, and it is precisely on account of the cheapness of grain that stock raising is so very profitable.

No place could be more favourable for stock raising than North-Western Iowa. It is within 20 hours by rail of Chicago, the greatest live-stock market in the world, and in direct communication with it by three main lines, with many branch lines; indeed it would be almost impossible to get more than 20 miles away from a railroad. It is sufficiently settled to make corn cheap—(last winter I bought maize for my stock at 6d. per bushel)—and yet with hundreds and hundreds of thousands of acres still untilled, on which, without paying any rent whatever, you can range your cattle all the summer, and make all the hay you want.

What, then, is the cost of feeding cattle? Last August I had 200 tons of hay put up on some unoccupied land in the vicinity of my stock farm, at a total cost of 2s. 5d. per ton.

So profitable, indeed, is stock raising that there are but few farms in the country that are not mortgaged to enable the owners to engage in it, and as there is a great want of capital, the usual and legal rate of interest is 10 per cent per annum, but I have actually known money borrowed, for putting into stock, at the enormous rate of two per cent per month. Thus handicapped, until they are able to make a clear start on their own capital, their advance is slow. Good calves are worth from 18s. to £1. 16s. each; as yearlings they find a ready sale from £2. 8s. to £2. 16s. each; as two-year-olds, £4. to £4. 8s. each; and at three, when ready to be fattened for the market, and weighing, say, 1,100lbs., will always fetch £6. 16s. to £8 per head. The cost of keeping them being so small, anyone can see how profitable stock raising is; and I know of no single instance of anyone with capital engaging in stock raising and not speculating who has failed to make it pay very handsomely.

I am only addressing myself to men with a certain amount of capital. An experienced and practical farmer who could arrive in Iowa with a clear £300 ought to do well, but I should advise that an inexperienced man should have £450 to £500. If practical men they cannot help doing well; I should not recommend artisans or mechanics to go to North-Western Iowa as it is purely an agricultural district. To labourers, also, I can hold out no great inducement. There is no lack of labour. I am paying for men on my farm £3. 8s. to £3. 12s. a month, or £1. 15s. to £2 a month and their board.

Sheep farming is also very profitable. I started with a small flock of 500 ewes fourteen months ago, and although I was not as lucky as some other sheep farmers in my neighbourhood, I cleared a net profit of 26 per cent in spite of the cost of sheds, &c., which considerable item of expense I shall save in the future.

There is plenty of room for more men to start in stock raising, and good land can yet be bought for £1 an acre, 80 to 160 acres being amply sufficient for the largest of stock farms. Land is rising, however; three years ago my farms cost me 12s. an acre.

The climate is good, and exceptionally healthy, and free from malarial diseases of any description. Only for a few days in summer does the thermometer exceed 92 degrees; and the cold, which does not set in till January, is a dry, invigorating cold, and easy to bear.

Iowa is altogether a settled state, and schools, churches of every denomination, hotels, stations, &c., abound in all directions, and the new comer has none of the hardships and roughing it to go through as in some of the more western states. The

population of Iowa is over 1,500,000, the eastern and southern parts being the most thickly populated. The people are industrious and thrifty, and the N. W. is entirely free from "coloured gentlemen" and low Irish. Life and property are perfectly secure.

I shall remain in the neighbourhood of Manchester for some days to come, and shall be glad to give anyone any information I can.—Yours, &c.,

Address me to care of Brooks' Estate Office,  
King-street, Manchester.

WM. BROOKS CLOSE.

The *Manchester Courier* published the following notice on the letter:—

An interesting letter will be found in another column from Mr. William B. Close. The writer points out the advantages of North-Western Iowa for emigrants, and founds his recommendations upon practical personal experience. He has no object to serve beyond the dissemination of truthful information in reference to the State, and intending emigrants and persons interested in emigration may place implicit confidence in his statements. His communication has been called forth by the appearance in our columns of a number of letters on the subject of emigration, and his desire is to assist those who have resolved to try "fresh fields and pastures new" in the selection of the scene of their future exertions. Mr. Close and his two brothers, who are related to one of the first families in this district, settled on the Missouri slope of Iowa about three years ago. They selected that State after an examination of most of the Northern States on this side the Rocky Mountains, and we are told they have never had any reason to regret their choice. This is not surprising when we read that "the richness, fertility, and depth of that famous soil have to be seen to be believed; it is practically inexhaustible, being largely impregnated with phosphates of lime, and having a porous sub-soil varying from 30 to 50 feet in depth, enabling the crops to thrive both in wet and dry seasons." The land will grow almost anything, the yield of wheat this year on several of Mr. Close's farms falling very little short of thirty bushels to the acre. Admirably adapted as the country is to grain growing, it appears to be even better adapted for stock raising, or at all events better returns can be obtained from stock raising than from grain growing, in consequence of the low price of cereals. There are hundreds of thousands of acres of splendid pasture land, undulating, intersected by countless streams, containing no swamps, still untilled. Feeding cattle in Iowa is not an expensive operation; indeed Mr. Close tells us that last winter he bought maize at 6d. a bushel, and that last month he had 200 tons of hay put upon some unoccupied land in the vicinity of his stock farm at 2s. 5d. a ton. But Mr. Close does not wish to encourage indiscriminate emigration to the State. They do not want labourers out there, but they want men with a certain amount of capital. With £400 or £500, practical men, we are told, could not help doing well. The climate is good; life and property are perfectly secure; the population is thrifty and industrious; and altogether the prospect is one which ought to cheer the drooping spirits of agriculturists in this country, who, for various reasons, are unable to make both ends meet.

It is often asked us how long will it be possible to range cattle on the prairies without paying any rent, and what will happen when the day comes, as it inevitably must, when the unoccupied lands are sold by the non-residents and settled on?

A stock farm situated near the Bluffs of the rivers will have plenty of range for fifteen or twenty years to come, as it will be long before these rougher lands are cultivated when there is so much good land yet untilled.

But the moment that grazing lands begin to get scarce, lands which were bought originally for £1 per acre will be worth £6 to £7, exclusive of improvements, and all the farmer has to do is to sell his farm, drive his stock further west, and begin again on a new farm, having cleared a handsome profit on the sale of his old farm.

### ESTIMATES.

We append estimates on cattle and hog raising, based on the actual experience of our own farms.

### CATTLE RAISING.

The cattle are out on the prairies all summer, and in winter are placed in yards, with rough sheds, and fed to hay and maize. Cattle are singularly free from any diseases whatever, especially those in an epidemical form.

50 heifers at £3. 15s., bought in the spring	...	...	...	...	...	...	...	...	...	£	s.	d.
1 bull	...	...	...	...	...	...	...	...	...	20	16	8
<i>First year's expenses :—</i>												
Keep of 51 head, at 18s. 9d. per head...	...	...	...	...	...	...	...	...	...	47	16	0
„ 40 calves, at 12s. 6d. per head	...	...	...	...	...	...	...	...	...	25	0	0
<i>Second year :—</i>												
Keep of 51 head, at 18s. 9d. per head...	...	...	...	...	...	...	...	...	...	47	16	0
„ 40 yearlings, at 18s. 9d. per head...	...	...	...	...	...	...	...	...	...	37	10	0
„ 40 calves, at 12s. 6d. per head	...	...	...	...	...	...	...	...	...	25	0	0
<i>Third year :—</i>												
Keep of 51 head at 18s. 9d. ...	...	...	...	...	...	...	...	...	...	47	16	0
„ 20 two-year-old steers at £2. 1s. 8d., fed on grain	...	...	...	...	...	...	...	...	...	41	13	4
„ 20 heifers, at 18s. 9d. per head	...	...	...	...	...	...	...	...	...	18	15	0
„ 40 yearlings, at 18s. 9d. per head...	...	...	...	...	...	...	...	...	...	37	10	0
„ 70 calves, at 12s. 6d. per head	...	...	...	...	...	...	...	...	...	43	15	0
Total expenses for three years ...										£580	18	0
<i>Value of stock at end of third year :—</i>												
50 cows, at £5. 4s. 2d. each	...	...	...	...	...	...	...	...	...	260	8	4
20 steers, at £12. 10s. each	...	...	...	...	...	...	...	...	...	250	0	0
20 heifers, at £5. 4s. 2s....	...	...	...	...	...	...	...	...	...	104	3	4
40 yearlings, at £3. 15s....	...	...	...	...	...	...	...	...	...	150	0	0
70 calves, at £2. 10s.	...	...	...	...	...	...	...	...	...	175	0	0
1 bull	...	...	...	...	...	...	...	...	...	20	16	8
										£960	8	4

Net profit, £379. 10s. 4d.

The cost of labour, salt, medicine, &c., is included in the above.

We have not deducted from this estimate any sum for the use of the farm. The share for the above cattle of the rent of a farm where hogs and sheep are also kept would be about £20.

## HOG RAISING.

Hogs cost almost nothing to keep, and they fatten rapidly on what they pick up in the yard from the leavings of the cattle, and one and a half hogs are counted to each head of cattle. The profits are enormous, but hogs are somewhat liable to an epidemic called lung disease, hog cholera, and by other names.

### THE ESTIMATE.

50 sows, averaging 75lbs. each.	£	s.	d.
25 young pigs, at 1½d. per lb. ... ..	35	3	1

#### *First year's expenses:*

Cost of grain in addition to milk from cows for keeping			
75 head ... ..	25	0	10

#### *Second year:*

Cost of above, with increase of 200 pigs ... ..	41	13	4
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#### *Third year:*

75 old hogs fattened from grain fed to cattle, and keep of			
350 head ... ..	52	1	8

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£153 18 11

#### *Valuation, third year:*

75 old hogs, weighing 300lbs. each, at 2d. per lb. ... ..	187	10	0
350 pigs, valued at ... ..	145	16	8

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£333 6 8

Net profit ... .. £179 7 9

This valuation is very low, and allows for the usual mortality and for all expenses.



## SHEEP FARMING.

Sheep, like cattle, are ranged on the prairies in the summer and yarded in the winter. They are particularly free from diseases, and are extremely profitable. We add the last year's balance sheet of Mr. W. H. Wann, the manager of Mr. W. B. Close's stock farm:—

### WILLIAM B. CLOSE *in account with* W. H. WANN.

	£	s.	d.
1st August, 1878. By cash ... ..	416	13	4
To buying 613 sheep ... ..	£355	16	6
„ Maize ... ..	39	18	7
„ Clipping ... ..	9	6	7
„ Hay ... ..	20	7	10
„ Salt ... ..	1	19	7
„ Medicine ... ..	0	11	5
„ Dipping ... ..	13	19	10
„ Herding for entire summer ... ..	9	11	8
	£451	12	0
„ Timber for sheds ... ..	10	17	9
„ Building ... ..	6	9	1
„ Labour... ..	3	12	11
	£472	11	9
<i>Sales:</i>			
2,738lbs. wool ... ..	101	16	3
11 hides ... ..	1	3	9
3 sheep sold ... ..	1	4	0
1 hide with wool ... ..	0	2	6
Present value of flock, including lambs, viz., 797 head at 12s. 6d. each... ..	498	2	6
	£602	9	0
To cost ... ..	472	11	9
Gross profit ... ..	£129	17	3

Or a fraction over 31 per cent on the original sum invested in sheep. A further charge of about 5 per cent should be deducted for rent of farm, making the net profit about 26 per cent. We lambed too soon, and lost a considerable number of lambs from a spell of cold weather that suddenly came early in March while lambing was in process.

## HOW TO LAY OUT £500 ON A STOCK FARM.

	£	s.	d.	£	s.	d.
New land, 80 acres at £1 per acre ... ..	80	0	0			
House, 16 by 22, complete ... ..	50	0	0			
Sheds, stabling, and yards ... ..	20	0	0			
Farm implements :—						
Breaking plough... ..	£3	12	0			
Stirring plough ... ..	2	8	0			
Cultivator for maize ... ..	11	0	0			
Harrow ... ..	2	0	0			
All other implements and tools for everything }	15	0	0			
				34	0	0
Furniture, including stove ... ..	20	0	0			
Three good heavy farm horses ... ..	60	0	0			
Wagon and harness ... ..	20	0	0			
Seed for new breaking and cropped the same summer :—						
20 acres in flax ... ..	£6	0	0			
10 acres in maize ... ..	1	0	0			
				7	0	0
Taxes ... ..				5	0	0
Total cost of farm complete ... ..	296	0	0	296	0	0
Cattle :—						
10 heifers at £3. 15s... ..	37	10	0			
10 yearling steers at £2. 8s. ... ..	24	0	0			
15 calves, 6 months old, and on grass, at £1. 8s. ... ..	21	0	0			
10 sows, 75lbs. each, at 1½d. per lb. ...	4	13	9			
Keep of the above for 1 year ... ..	24	10	0			
				111	13	9
Balance for emergencies and for keep during the year, also for keep of horses, etc. ; remainder to be invested at the end of the first year ... ..				92	6	3
				£500	0	0

We have taken a very wide margin in the above estimate, and a practical farmer with less capital than £500, who would not mind roughing it for a time and is given to expedients, could effect a very considerable

saving. In the first place forty acres would be sufficient for the small capitalist to start with. A house  $14 \times 18$ , with a room above, would only cost £35. He could make his stables of uprights and posts with hay, and £10 would then cover all expenses of stables and yards. Also for the first year or two he could save the large item of £11 for the "cultivator," using his stirring plough instead, but in the latter case it would take him twice the time to cultivate his maize.\* He would require only two horses, and would also save in taxes and in various small items.

### RETURNS THE SAME YEAR.

Breaking begins about the 1st May, and lasts to about the 15th July. Flax is sown on early breaking and harvested in August. We have known it yield as high as 19 bushels to the acre, but the average is about 8 bushels. It always fetches over 4 shillings per bushel; thus, taking the average, the receipts on the farm we have given an estimate for would be £32 from 20 acres, yielding 8 bushels per acre, at 4s. per bushel. Deduct £5 for cutting, threshing, &c., and £6 for seed, and the profit is about £21.

Maize on new breaking yields on an average 35 bushels to the acre. The cost of harvesting is only the actual labour expended, which would be for 10 acres under £1.

10 acres yielding 35 bushels per acre, at 7d. per bushel, £10. 4s. 2d.

Maize has been known to yield over 100 bushels to the acre on old ground, but 60 bushels is a good crop. We have quoted all through last winter's prices.

### COST OF GETTING OUT

depends on the line used ; but the actual fare to Le Mars by the steamship and railroad lines, with whom we have made special rates, is—

By steerage and emigrant trains, under	...	...	...	£11
„ intermediate	„	„	...	£18
„ saloon and first-class trains	...	...	...	£15 to £19

Time occupied in getting from Liverpool to Le Mars is from twelve to fourteen days.

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\* Until the young maize plant has a fair start, it is necessary three or four times to plough or cultivate between the rows to keep the weeds down.

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WHEN TO GO OUT.

Nothing much can be done until spring and summer in getting a new farm into order ; and if a person can live more economically in England, he had perhaps best remain where he is, and go out early in March. But if not, and he does not mind going into the cold, which sets in in December, there is no reason why he should not go out in the winter and gain experience on a farm by learning the country and the ways of the people. Board and lodging can be got on a farm for about ten shillings a week, but at that price one would have to expect to rough it somewhat.

For further information, or for a personal interview, or for a copy of this pamphlet, address

WM. B. CLOSE,  
90, KING STREET,  
MANCHESTER ;

or

JAMES B. CLOSE,  
Le Mars, Iowa.

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We append the following letter, which we have received from Mr. W. H. Statter, of Whitefield, Manchester, in answer to one asking him to give his views on the country :—

4th October, 1879.

My dear Close,—Having now been some time in America, and making it my business to ascertain what can be done in an agricultural point of view, I think I may safely say that North-Western Iowa gives to the practical man more facilities than almost any other part that I have seen for general farming, and more particularly stock raising.

The soil, being naturally rich, requires very little or no additional keeping up, and I am rather astonished to see so little root crop grown. Corn this year is a splendid crop, but still keeps a firm price in the market. The rich grass slopes of the Missouri river, and also the valleys of both the Big and Little Sioux and the Floyd rivers, are specially adapted for stock raising, which, in my opinion, is *the* business of this part of the country ; the land, being a gently rising slope, is the finest pasturage for sheep, the bottom land being more for cattle. Hay also is very cheap, and specially good. I put up about 200 tons this year of the best that could be got at an average cost of 3s. 6d. per ton in the stack.

Cattle also are cheap to buy. I gave £4 per head for good two-year-old heifers, and £5 for two-year-old steers. The keep of these is very small, and I expect the increase alone to pay me good interest on the amount expended in food and purchase.

Pigs also are a capital investment, as the statement you received the other day will show.

Add to these advantages any amount of capital water, which is to be got nearly in every section of country round here, and you have what I consider a perfect stock country. The means of getting cattle, &c., to Chicago, which, as you know, is the great cattle centre of the West, could not be better, as there are three main lines which do the journey in about 20 hours, and at very fair rates.

I don't advise anyone starting the stock business to buy more than 160 acres of land, just enough to grow corn for winter, and to put up buildings. These also are cheap. The grazing, of course, is free.

We are having splendid weather—warm days and cool nights. I expect to get into my new place next week. I shall be very glad, as the stock are at present scattered, and it is now time to commence feeding in the yards. I shall be obliged if you will explain everything to my brother, G. F. Statter, as he has serious thoughts of coming out here. With kind regards,

Believe me, truly yours,

WM. H. STATTER.

Le Mars, Iowa, U.S.A.

The best references can be given by the firm.

The following gentlemen who are out in North-Western Iowa can be communicated with :—

	ADDRESS.
W. HYNDMAN WANN, Esq., late of Belfast, Ireland ... ..	Le Mars, Plymouth Co., Iowa.
H. W. THOMPSON, Esq., late of Belfast, Ireland ... ..	„ „
R. G. MAXTONE GRAHAM, Esq., of Battleby, Red Gorton, Perthshire, N.B. ... ..	„ „
W. ROYLANCE COURT, Jun., Esq., of Newton Manor, Middlewich, Cheshire ... ..	„ „
W. H. STATTER, Esq., of Whitefield, Man- chester ... ..	„ „
GERALD GARNETT, Esq., of Wyreside, Lan- caster ... ..	„ „
H. RICKARDS, Esq., Carleton Lodge, Whalley Range, Manchester ... ..	„ „
H. GREY DE PLEDGE, Esq., Gloucester ...	„ „
DAVID B. M'LAREN, Esq., Manchester ...	„ „

And several others.

*Mr. Wm. B. Close has received the following letters from  
Le Mars :—*

Le Mars, Plymouth Co.,  
Iowa, U.S.A.,  
9th October, 1879.

My dear Close,—As you know, I have been out here some eight months, and as it was on your recommendation and the talks we had together about this country that were the cause of my coming here, I only think it fair that I should tell you how thoroughly satisfied I am with the country and all I have done here ; more particularly with my investments in land. I enjoy the life, and find myself much better in *health* than ever I was in Manchester. Times still continue good.

Believe me, ever yours truly,

ROBT. G. MAXTONE GRAHAM.

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Mr. W. Roylance Court, Jun., writes on 9th October, 1879 :—

When you left for England I had not given you my opinion on the resources of this country. As it was through you I came out, you may wish to know what conclusions I have come to. After six months' careful investigation, I am satisfied that the description you gave me of this country for farming purposes (especially stock) is fully borne out. I think there is a good opening for practical men with a little capital. I know of nothing I would sooner invest in than land here.

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